

REMARKS

Applicant notes the filing of an Information Disclosure Statement herein on December 3, 2003 and note that no copy of the PTO-1449 was returned with the outstanding Office Action. Applicant respectfully requests that the information cited on the PTO-1449 (which is the same as that of record to that date in the parent application hereto) be made of record herein.

The Office Action mailed November 6, 2003, has been received and reviewed. Claims 1 through 74 are currently pending in the application, of which claims 1 through 31, and 51 through 66 are currently under examination. Claims 32 through 50, and 67 through 74 are withdrawn from consideration as being drawn to a non-elected invention, and have been canceled. Claims 1 through 16, and 51 stand rejected. Claims 17 through 31 are allowed. Claims 52 through 66 have been objected to as being dependent upon rejected base claims, but the indication of allowable subject matter in such claims is noted with appreciation.

Applicant has amended claims 17 and 51. Applicant notes that the amendment to claim 17 is solely for the purpose of correcting a grammatical error, and not for the purpose of narrowing the claim. As such, Applicant respectfully asserts that no surrender or disclaimer of claim scope, and more specifically, of the broadest possible range of equivalents to which Applicant may be entitled has been effectuated. Applicant respectfully request reconsideration of the application as amended herein.

Preliminary Amendment

Applicant's undersigned attorney notes the filing herein of a Preliminary Amendment on November 8, 2001, which filing was not acknowledged in the outstanding Office Action. Should the Preliminary Amendment have failed for some reason to have been entered in the Office file, Applicant's undersigned attorney will be happy to have a true copy thereof hand-delivered to the Examiner.

35 U.S.C. § 102 Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,985,185 to Steijer et al.

Claims 1 through 3 and 15 stand rejected under 35 U.S.C. § 102(b) as being anticipated

by Steijer et al. (U.S. Patent No. 5,985,185). Applicant respectfully traverses this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Steijer et al. is directed to encapsulating optocomponents with a capsule of plastic or resin material using a mould assembly. As described, the mould assembly comprises a lower mould half 1 having a mould cavity 3 and an upper mould half 17 having a mould cavity 19 (Figs. 1 and 2). The mould assembly is configured to receive a lead frame 51, which rests on shoulders 71 of mould cavity 3 (col. 6, lines 3-16). Lower mould half 1 further includes fixed guide pins 73 that are placed in holes 75 of lead frame 51 in order to keep lead frame 51 in its correct position in mould cavity 3. Both lower mould half 1 and upper mould half 17 include guide pins 85 and corresponding holes 87 for receiving guide pins 85, the function of which is to place the two mould halves 1 and 17 in mutually correct positions during the moulding process (Figs. 1 and 2 and col. 7, lines 57-61).

Applicant respectfully submits that Steijer et al. does not anticipate any of claims 1 through 3 and 15, because the cited reference fails to describe, either expressly or inherently, each and every element set forth in the claims.

First, claim 1 recites the limitation of a first platen including “sets of alignment elements configured and positioned for cooperatively engaging sets of alignment features of a like *plurality of electronic component assemblies* arranged in a *plurality of mutually laterally spaced locations* over the first platen.” (Emphasis added.) Steijer et al. does not describe a platen having sets of alignment elements configured for engaging a plurality of electronic component assemblies. Rather, the mould assembly of Steijer et al. is illustrated and described as having mould halves 1 and 17 and fixed guide pins 73 that are configured to receive a *single* lead frame 51. Accordingly, Steijer et al. does not describe that a plurality of electronic component assemblies may be arranged over mould half 1, and also does not describe sets of alignment

features configured to engage a plurality of electronic component assemblies.

Second, claim 1 also recites the limitation of a second platen including “a plurality of component cavities *extending therethrough* at a plurality of mutually laterally spaced locations corresponding to the locations over the first platen.” (Emphasis added.) Steijer et al., on the other hand, illustrates that both mould cavities 3 and 19 are formed into only a partial depth of mould halves 1 and 17 (Fig. 4). Forming mould cavities 3 and 19 in this manner is obviously necessary in order for the mould assembly to be able to carry out its intended function of enclosing the material for encapsulating lead frame 51. Therefore, Steijer et al. does not describe component cavities that extend *through* either of mould halves 1 and 17.

In view of the foregoing, claim 1 is allowable over Steijer et al. under the provisions of 35 U.S.C. § 102(b). Claims 2, 3, and 15, which depend from and incorporate all of the limitations of claim 1, are also allowable.

Anticipation Rejection Based on U.S. Patent No. 6,482,576 to Farnworth et al.

Claim 51 stands rejected under 35 U.S.C. § 102(a) as being anticipated by Farnworth et al. (U.S. Patent No. 6,482,576). Applicant respectfully traverses this rejection, as hereinafter set forth.

Initially, Applicant notes that claim 51 has been rejected under 35 U.S.C. § 102(a). The filing date for the present invention is August 30, 2001, and Farnworth et al. did not issue until November 19, 2002. Farnworth et al., therefore, would be considered as a prior art reference under 35 U.S.C. § 102(e), and not under 35 U.S.C. § 102(a). *See* MPEP 706.02(a)(III).

Farnworth et al. is directed to forming multilayer structures with vertical or near-vertical sides using a stereolithography (STL) apparatus 10 (Fig. 1) equipped with a machine vision system. STL apparatus 10 includes a reservoir 14 for holding liquid STL material and a support platform 20 upon which STL structures are formed. Support platform 20 is vertically movable within reservoir 14 by actuator 36 and platform controller 32. In addition, using actuator 36, platform 20 is tiltable to an acute angle 62 with the horizontal plane, and may also be rotatable about a vertical axis 70 (Figs. 1 and 7 and col. 6, lines 24-28). The machine vision system associated with STL apparatus 10 includes a camera 76 to locate the position and orientation of

objects 44 on platform 20 (col. 10, lines 17-24). A computer 12 is also provided to control the positioning of platform 20 and receives data from camera 76 (Fig. 1).

Applicant respectfully submits that Farnworth et al. does not anticipate any of claim 51, because the cited reference fails to describe, either expressly or inherently, each and every element set forth in the claim.

Claim 51, as amended herein, recites the limitation of a platen assembly support structure “enabling *inversion* of a platen assembly engaged therewith by rotation of the platen assembly about a horizontal axis.” (Emphasis added.) Farnworth et al. does not describe a platen assembly support structure configured for *inversion* of a platen assembly about a horizontal axis. Rather, Farnworth et al. describes actuator 36 and platform controller 32 as being limited to *tilting* platform 20 (Fig. 7, col. 6, lines 24-28 and col. 13, lines 14-18).

Accordingly, claim 51 is allowable over Farnworth et al. under the provisions of 35 U.S.C. § 102(a) or 35 U.S.C. § 102(e).

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,985,185 to Steijer et al. as applied to claims 1 through 3 and 15 above, and further in view of U.S. Patent No. 6,562,272 to Chang et al.

Claims 4 through 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Steijer et al. (U.S. Patent No. 5,985,185) as applied to claims 1 through 3 and 15 above, and further in view of Chang et al. (U.S. Patent No. 6,562,272). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. § 103(a) obviousness rejections of claims 4 through 14 are improper because they fail to establish a prima facie case of obviousness.

Chang et al. is directed to array type molding of chip laminate packages, and is combined with Steijer et al. to provide the asserted teaching of a “plurality of subcavities formed by strut members.” Initially, Applicant notes that the Office has mischaracterized Chang et al. in that the cited elements 110 and 120 do not comprise a platen having mutually laterally spaced cavities with multiple strut members between cavities. Rather, the elements disclosed by Chang et al. comprise a substrate sheet 110 carrying a plurality of chips 30, with chip array blocks 730 being encased in mold caps 120 (Figs 6 and 7, col. 5, lines 6-7, and col. 6, lines 1-22). One of ordinary skill in the art would, therefore, not be motivated to combine the reference teachings as presented by the Office in the instant rejection.

Furthermore, claim 1 recites the limitation of a second platen including “a plurality of component cavities *extending therethrough* at a plurality of mutually laterally spaced locations corresponding to the locations over the first platen.” (Emphasis added.) For the same reasons as discussed above with respect to the rejection of claim 1, neither Steijer et al. nor Chang et al. teach or suggest component cavities that extend *through* a platen as recited in claim 1.

Accordingly, claim 1 is allowable over the cited references under 35 U.S.C. § 103(a), and claims 4 through 14 are allowable in depending therefrom. If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

Objections to Claims 52 through 66/Allowable Subject Matter

Claims 52 through 66 stand objected to as being dependent upon rejected base claims, but are indicated to contain allowable subject matter and would be allowable if placed in appropriate independent form. While the indication of allowable subject matter is greatly appreciated, Applicant respectfully submits that claims 52 and 66 are allowable in their present form as depending from amended claim 51.

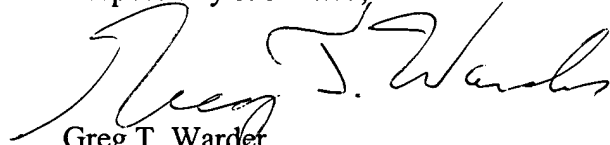
ENTRY OF AMENDMENTS

The amendments to claims 17 and 51 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application.

CONCLUSION

Claims 1 through 31 and 51 through 66 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Greg T. Warder", is written over the typed name.

Greg T. Warder

Registration No. 50,208

Attorney for Applicant

TRASKBRITT

P.O. Box 2550

Salt Lake City, Utah 84110-2550

Telephone: 801-532-1922

Date: January 19, 2004

JAW/dlm:ljb

Document in ProLaw